

IN THE CLAIMS:

Please amend claims 20, 22, 25, and 26, and cancel claim 30, without prejudice or disclaimer, as follows.

Claims 1-19. (Cancelled)

20. (Currently Amended) A method of sending packets between trunked network switches, said method comprising:

~~receiving a packet from a source at a first port of a trunked network switch;~~

identifying that ~~the~~ a trunked network switch includes comprising ports, an adjustable number of which are bundled as a trunk group;

identifying that ~~the~~ a packet received from ~~the~~ a source ~~is~~ destined for a destination ~~which must~~ to be accessed through the trunk group, by checking a trunk bit in a lookup table;

identifying an appropriate trunk port of the trunk group on which to send the packet to the destination, wherein said identifying of the appropriate trunk port comprises

identifying a trunk group identification in a lookup entry,

determining a trunk port index based upon the rules tag, and

applying the trunk group identification and the trunk port index to a trunk group table to identify the appropriate trunk port for communication; and

forwarding the packet to the destination on the appropriate trunk port.

21. (Previously Presented) A method as recited in claim 20, wherein said step of identifying the trunk port for communication includes a step of performing a lookup of the destination address in the lookup table, and identifying the trunk port based upon the lookup.

22. (Currently Amended) A method as recited in claim 21, wherein said step of identifying the trunk port further comprises the steps of

determining a destination address match in the lookup table; and
identifying a rules tag in the lookup table;
~~identifying a trunk group identification in a lookup entry;~~
~~determining a trunk port index based upon the rules tag;~~
~~applying the trunk group identification and the trunk port index to a trunk group table, said table therefore identifying a trunk port for communication.~~

23. (Previously presented) A method of sending packets between trunked network switches, said method comprising:

receiving a packet from a source at a first port of a trunked network switch;
identifying that the first switch includes ports which are bundled as a trunk group;
identifying that the packet received from the source is destined for a destination which must be accessed through the trunk group, by checking a trunk bit in a lookup table;

identifying an appropriate trunk port of the trunk group on which to send the packet to the destination; and

forwarding the packet to the destination on the appropriate trunk port,

wherein said step of identifying the trunk port for communication includes a step of performing a lookup of the destination address in the lookup table, and identifying the trunk port based upon the lookup,

wherein said step of identifying the trunk port further comprises the steps of

determining a destination address match in the lookup table;

identifying a rules tag in the lookup table;

identifying a trunk group identification in a lookup entry;

determining a trunk port index based upon the rules tag; and

applying the trunk group identification and the trunk port index to a trunk group table, said table therefore identifying a trunk port for communication, and

wherein said rules tag identifies the trunk port index based upon predetermined bits of at least one of a source IP address and a destination IP address.

24. (Previously Presented) A method as recited in claim 20, wherein said step of identifying the trunk port for communication comprises a step of applying trunking information to a trunk group table.

25. (Currently Amended) A method of sending packets between trunked network switches, said method comprising:

receiving a packet from a source at a first port of a trunked network switch;

identifying that the first switch includes ports, an adjustable number of which are bundled as a trunk group;

identifying that the packet received from the source is destined for a destination which must be accessed through the trunk group, by checking a trunk bit in a lookup table;

identifying an appropriate trunk port of the trunk group on which to send the packet to the destination by determining a trunk port index based upon a rules tag in a matching lookup entry; and

forwarding the packet to the destination on the appropriate trunk port,

wherein said step of identifying the trunk port for communication comprises a step of applying trunking information to ~~a~~ the trunk group table, and

wherein said trunk group table is modified to reflect trunk port failures.

26. (Currently Amended) A system for sending packets between ports on trunked network switches, said system comprising:

a first switch having a plurality of communication ports;

a second switch having a plurality of communication ports;

a trunk connection between said first switch and said second switch, wherein the trunk connection comprises an adjustable number of ports;

a sending unit for sending a packet from a first port of said first switch to a second port of said second switch;

an ingress unit in said first switch for receiving said packet from a source, and for performing an address resolution lookup on one of a source address and a destination address of the packet based upon a lookup table;

an identifying unit for identifying that the first switch and second switch are connected by the trunk connection by checking a trunk bit in the lookup table, and for identifying an appropriate trunk port of a trunk group on which to send the packet to a destination by determining a trunk port index based upon a rules tag in a matching lookup entry; and

a forwarding unit for forwarding the packet to the destination on the appropriate trunk port.

27. (Previously Presented) A system as recited in claim 26, wherein said identifying unit comprises a lookup unit for looking up the destination address in the lookup table.

28. (Previously Presented) A system as recited in claim 26, wherein said lookup table comprises address entries and corresponding rules tag information.

29. (Previously Presented) A system as recited in claim 28, wherein said lookup table further comprises trunk group identification information.

30. (Cancelled)

31. (Previously presented) A system for sending packets between ports on trunked network switches, said system comprising:

- a first switch having a plurality of communication ports;

- a second switch having a plurality of communication ports;

- a trunk connection between said first switch and said second switch;

- a sending unit for sending a packet from a first port of said first switch to a second port of said second switch;

- an ingress unit in said first switch for receiving said packet from a source, and for performing an address resolution lookup on one of a source address and a destination address of the packet based upon a lookup table;

- an identifying unit for identifying that the first switch and second switch are connected by the trunk connection by checking a trunk bit in the lookup table, and for identifying an appropriate trunk port of a trunk group on which to send the packet to a destination; and

a forwarding unit for forwarding the packet to the destination on the appropriate trunk port,

wherein said lookup table comprises address entries and corresponding rules tag information,

wherein said lookup table further comprises trunk group identification information,

wherein said identifying unit identifies the appropriate trunk port by determining a trunk port index based upon a rules tag in a matching lookup entry, and

wherein said identifying unit is configured to identify the trunk port index based upon predetermined bits of at least one of a source IP address and a destination IP address.

32. (Previously Presented) A system as recited in claim 26, wherein said identifying unit identifies the appropriate trunk port by applying trunking information to a trunk group table.

33. (Previously Presented) A system for sending packets between ports on trunked network switches, said system comprising:

a first switch having a plurality of communication ports;

a second switch having a plurality of communication ports;

a trunk connection between said first switch and said second switch;

a sending unit for sending a packet from a first port of said first switch to a second port of said second switch;

an ingress unit in said first switch for receiving said packet from a source, and for performing an address resolution lookup on one of a source address and a destination address of the packet based upon a lookup table;

an identifying unit for identifying that the first switch and second switch are connected by the trunk connection by checking a trunk bit in the lookup table, and for identifying an appropriate trunk port of a trunk group on which to send the packet to a destination; and

a forwarding unit for forwarding the packet to the destination on the appropriate trunk port,

wherein said identifying unit comprises modification means to modify trunk group information to reflect trunk port failures and identifies the appropriate trunk port by determining a trunk port index based upon a rules tag in a matching lookup entry.